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ABSTRACT

The manual is designed to provide information to teachers, parents, and school administrators about health impaired children with medically diagnosed physical conditions. Definitions, common symptoms, incidence, age of onset, prognosis, most typical treatment, educational significance, educational adaptations, and symptoms to look out for are given for 15 conditions: allergies, arthritis, asthma, epilepsy, heart condition, hemophilia, hyperkinesis, hypertension, hypoglycemia, juvenile diabetes, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and tuberculosis. (CL)

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HELP HINTS FOR THE

MANAGEMENT OF

OTHER HEALTH IMPAIRED CHILDREN

ED193831

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1978

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FOREWORD

Teachers who accept the responsibility for imparting knowledge to students also implicitly accept responsibility for overseeing their safety and welfare while in the classroom. Necessarily then teachers must accept and share in the supervision of children who become sick during the school day. They must use good judgment in determining whether the child should remain in school, be sent home, or whether professional medical assistance is required.

Another group of children require similar judgment by teachers. Children with chronic illnesses, handicaps, or congenital deformities may require special management by teachers so that a comfortable relationship may be established between their physical deficits and the academic environment. This special handling will promote academic achievement and will minimize the impact of such illnesses and handicaps. Indeed, these students may thus be encouraged to excel in compensation for their limitations in other areas such as sports.

Childhood chronic illnesses can be rather significant

psychological deterrents to education if they are not well-managed by parents and teachers. Childhood illnesses can be better managed if teachers and parents display confidence. Confidence can be properly displayed if teachers are completely informed as to the nature of the disorder, what emergencies can arise, and what steps should be taken to meet the particular needs of such students on a day to day basis, and during crisis situations.

It is the purpose of this guide to give teachers additional confidence in dealing with children who have chronic childhood illnesses. It points out the major signs and symptoms and problems encountered with any common disorders, and the side effects of some commonly employed treatments. This guide focuses sharp attention on special alerting situations which require immediate action by the teacher. This serves to bolster the confidence of the teacher and student alike.

The guide goes further however, because it specifies additional measures that can be reasonably accomplished within the classroom setting to accommodate these children comfortably to their educational environment. It suggests special seating arrangements, individualized

task assignments and other factors that recognize the student's special limitations, yet it recommends alternative challenging and satisfying assignments so that the student will not feel left out.

It is hoped that with this guide teachers will feel confident and be more competent to manage the education of these special children wisely and effectively.

Leon E. Curry, M.D. DABFP/FAAFP

INTRODUCTION

In the United States there is a growing concern that an equal educational opportunity be provided for all children with particular emphasis on the handicapped. Congressional interests in this area have resulted in THE EDUCATION FOR ALL HANDICAPPED CHILDREN ACT OF 1975, commonly called Public law 94-142. This law proposes that the federal government become more involved in the education of handicapped children by providing excess costs monies directly to state and local education agencies. These entitlements are accompanied by emerging regulations and guidelines that require concentrated child find components and specific intervention plans.

Included in the definition of handicapped children issued by the Bureau of Education for the Handicapped is a new classification of children entitled "Other Health Impaired." These are children who have medically diagnosed physical conditions which are non-communicable including limited strength, vitality or alertness due to chronic or acute health problems such as a heart condition, tuberculosis,

rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia and other cancers, or diabetes. The hyperkinetic child would also be placed in this category.

Other Health Impaired (OHI) children present a particular problem to teachers, school administrators, and parents. These children have medical problems that may affect their schooling in some way. These children often need special attention in the school setting. It may be as minor as arranging for medication during the day or as major as chronic absenteeism. Special diets may be needed. Physical education may need to be adapted.

One of the most essential components for the OHI program is coordination of services. The needs of the child must be identified. A program must be planned and monitored to insure the best learning conditions.

The purpose of the manual, Help Hints for the Management of Other Health Impaired Children, is to provide information to teachers, parents, and school administrators. This material can be used to serve the OHI child in the most appropriate manner.

HOW TO USE THE GUIDE

The guide consists of more than fifteen medical conditions most frequently found among Other Health Impaired children. Under each condition, a simple definition is provided. A list of the most common symptoms is included. The incidence of the condition in the child population and the most common age of onset is given. The prognosis and most typical treatment are explained.

The educational significance of the condition is presented so that the handicap may be understood in educational terms. The long term effects of the medical problem as it relates to the total educational program is discussed.

In planning the daily activities for the child, the section entitled educational adaptations should be of most value. It is subdivided into Physical Adaptations, which include classroom environment, physical education, and diet. Academic Adaptations and Classroom Management are provided.

In the final section, Feedback Alerts are given so that the teacher or parent will know when to contact the physician or to make additional adaptations in the educational program. Since many of these conditions have remission and recurrence cycles, the educational program must be flexible. The Feedback Alerts give warning signals and crisis intervention techniques.

Help Hints for the Management of Other Health Impaired Children is not meant to be all inclusive. Many other health problems could have been considered. Many additional management techniques could have been described. This guide is designed as a framework on which to build. As other conditions occur, similar information can be secured and included in the handbook.

CONDITION:	Allergies Chronic Acute - insect stings Chronic - to environmental factors
DEFINITION:	altered reaction of the tissues in certain individuals on exposure to agents that cause no reaction in other normal persons
SYMPTOMS:	1) persistent cold-like symptoms; runny nose, sneezing or coughing, 2) wheezing, 3) diminished hearing, 4) recurrent headaches, 5) itching, watering, burning eyes, 6) skin rash, 7) more severe swelling after being bitten by an insect
INCIDENCE:	2-3% of the population have medically significant symptoms
AGE OF ONSET:	any age from birth to adult
PROGNOSIS:	good for controlling conditions; cure unknown at present

TREATMENT: 1) avoidance of allergen, 2) medication to reduce symptoms, 3) desensitization

EDUCATIONAL SIGNIFICANCE:

child may have reduced alertness or reduced hearing during attacks; inability to concentrate, irritableness; lethargic

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment
      keep away from known allergens such as house dust, chalkdust, animal hair, pollens
   b. Physical Education
      limit during attacks; normal at other times
   c. Diet
      control for known allergens; substitute essential nutrients with non-allergens
2. ACADEMIC
   during attacks make allowances for hearing loss, dull responses,

inability to concentrate; treatment with antihistamines, as well as the allergic disorder, causes drowsiness and diminished alertness; consider postponing major tests when symptomatic; expect less than normal production

3. CLASSROOM MANAGEMENT

treat as normal as possible; do not let the child use his illness as an excuse for not performing

FEEDBACK ALERTS:

if the child has an acute reaction or symptoms reappear, notify parents and/or doctor; some symptoms are wheezing, shortness of breath, runny eyes or nose, itching

NOTES

CONDITION: Arthritis - Juvenile Rheumatoid

DEFINITION: a chronic disease characterized by inflammation of the joints usually accompanied by marked deformities, inflammatory changes in the synovial membranes and joints, and wasting away of bones

SYMPTOMS: three types

1. Systemic - the symptoms are: high fever once or twice a day; visibly enlarged back lymph nodes; large spleen; rapidly changing flat pink rash; generalized malaise and fatigue
2. Polyarticular - most common; may have systemic symptoms but all have severely involved joints; most frequently involved are the knees, ankles, wrist; then may progress to neck, fingers, elbows, and shoulders; child will be in much pain and may be small for age
3. Pauciarticular - will have four or fewer painful and swollen joints within the first three months; most

serious problem is inflammation of the iris and the controlling muscles of the lens of the eye

INCIDENCE: .5%

AGE OF ONSET: infancy to adult

PROGNOSIS: recovery, remission, controlled; depends on the severity

TREATMENT: drug therapy (mainly aspirin); rest, exercise by a physical therapist or under the direction of a physical therapist

EDUCATIONAL SIGNIFICANCE:

child will need frequent rest periods; will need to be allowed to move frequently; as a result of the high levels of aspirin, the child may have a high tone hearing loss; may experience a vision loss; may be easily fatigued, irritable, and unreachable after a bad night; these factors may prevent the

child from performing in accord with his mental age

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - needs preferential seating for vision and hearing problems; needs more time to move from place to place
   b. Physical Education - exercise under the direction of a physical therapist; swimming good
   c. Diet - highly nutritious, balanced diet
2. ACADEMIC
   rest periods; limit homework; remediation for time missed during absences
3. CLASSROOM MANAGEMENT
   rest one hour per day when active; characteristic behaviors which accompany this condition are depression, fear and anxiety, and pain

FEEDBACK ALERTS:

the teacher should be on the alert for vision problems; return of fever, pain, or rash as a recurrence of the condition should serve as a signal

NOTES

CONDITION: Asthma

DEFINITION: a labored wheezing breathing caused by interference with the normal flow of air in and out of the lungs by constriction of the bronchial tubes

SYMPTOMS: shortness of breath; cough, wheezing, raspiness, prolonged expiratory phase of respiration

INCIDENCE: 2.58%

AGE OF ONSET: any - usually early childhood

PROGNOSIS: the longer the duration of symptoms and the more severe the attacks, the poorer the prognosis; repeated frequent attacks result in damaged lungs

EDUCATIONAL SIGNIFICANCE:

high degree of stress and anxiety and frustration can trigger attacks; educational input to teach to avoid any allergens; condition may become a crutch

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL

   a. Classroom environment - do not bring allergens into the classroom; keep in during severely cold weather; reduce house dust, chalk dust to minimum

   b. Physical Education - activities such as baseball which require short bursts of physical effort may be permissible; swimming best for breath control; caution with strenuous calisthenics or weight lifting

   c. Diet - avoid foods that cause allergic reactions; be careful with seafoods especially

2. ACADEMIC

   during attacks, limit requirements to avoid stress; treat as normal otherwise

3. CLASSROOM MANAGEMENT

   avoid emotional upsets; may bring on attacks

FEEDBACK ALERTS:

cold, runny nose, dry hacking cough, and some wheezing; with onset of attack students become very anxious; they need quiet, calm treatment; if fingernails and mouth turn blue, contact parents and/or doctor; some severe asthmatics may have an aerosol spray on their person for use during an acute attack

CAUTION: Teachers can themselves become very anxious watching an asthmatic child struggle for air; call parents early

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NOTES

CONDITION: Epilepsy

DEFINITION: a disorder of the central nervous system characterized by sudden seizures due to abnormal electrical discharges of brain cells

SYMPTOMS: depends upon type of seizure disorder; from temporary disorientation to complete loss of consciousness and convulsive movements; occasionally psychomotor type seizures cause bizarre behavior

TYPES:

1. Grand mal seizures - take the form of blackouts and violent shaking of the entire body; may be accompanied by irregular breathing, drooling, or a pale blue color in the face, fingernails, or lips; some patients experience a warning called "aura" before a seizure; after the seizure the patient may feel confused and may fall asleep

2. Petit mal - seizures that occur most often between ages of 6 and 14; may appear to be staring spells; sometimes mistaken for daydreaming and may result in behavior or learning problems; other signs may be rapid blinking of the eyes and/or small twitching movements: this type of seizure may occur as frequently as 100 times per day, and most often lasts less than a minute; after the seizure occurred, as if nothing had happened
3. Psychomotor seizures take a variety of forms, including chewing and lip smacking, staring, headaches and stomachaches, color changes, spots before the eyes. buzzing or ringing in the ears, dizziness, or strong emotions - such as fear or rage; sometimes the patient cannot remember what has happened during the attack;

Purposeless movements are common, such as, night or day walking, picking at or taking off clothes, and rubbing hands or legs; these movements are called automatism

4. Focal Motor seizures originate in the area of the brain which controls muscle movement. When the nerve cells in this area produce a sudden electrical charge, various parts of the body may jerk, or show other forms of movements, in an orderly way. The individual is conscious throughout a motor seizure, and is left with only some muscle weakness in the area affected.
5. Autonomic seizures consist of repeatedly occurring symptoms of headache, stomachache, nausea, vomiting or fever which may contribute to periodic behavioral learning and emotional problems.

There are other types of seizures such as infantile myoclonic and

akinetic convulsions. It is also possible for an epileptic patient to have more than one type of seizure.

INCIDENCE: .5%

AGE OF ONSET: infancy to adult

PROGNOSIS: good; controllable

TREATMENT: drug therapy; surgery for severe cases

EDUCATIONAL SIGNIFICANCE:

career guidance for suitable career; brain damage may rarely occur; slight seizures may cause student to appear inattentive or to be daydreaming (petit mal)

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - provide a space for the student to lie

down should he begin to feel like he is going to have a seizure

b. Physical Education - limitations depend upon the effect of exertion on seizure control; poorly controlled children (those with frequent seizures), should be monitored in activities involving climbing and swimming

c. Diet - no special diet

2. ACADEMIC

should be psychologically examined; epilepsy often accompanies mental retardation but not necessarily so; adjust curriculum to level of mental functioning of the child

3. CLASSROOM MANAGEMENT - observe the child for seizures; watch for signs of approaching seizures; avoid photic stimuli -- flickering movie film or fluorescent lights may bring on some seizures

FEEDBACK ALERTS:

First Aid for Seizures

*there is nothing that can be done for petit mal and psychomotor seizures but to explain to the other pupils

**FOR GRAND MAL SEIZURES:

1. Keep calm. Ease the child to the floor and loosen his collar; if you cannot stop the seizure let it run its course and do not try to revive the child

2. Remove hard, sharp or hot objects which may injure the child, but do not interfere with his movements

3. Do not force anything between his teeth

4. Turn the head to one side for release of saliva; place something soft under his head

5. When the child regains consciousness let him rest if he wishes

6. If the seizures last beyond a few minutes or the child seems to pass from one seizure to another without gaining consciousness, call the doctor for instructions and notify his parents--this rarely happens but should be treated immediately

NOTES

CONDITION: Heart Condition (congenital)

DEFINITION: malformed heart from birth

SYMPTOMS: generalized swelling, especially legs and feet, shortness of breath, fatigue, cyanosis, black-outs

INCIDENCE: less than 1%

AGE OF ONSET: birth or first two years of life

PROGNOSIS: good if child survives first two weeks of life

TREATMENT: surgery, medication, diet (low sodium)

EDUCATIONAL SIGNIFICANCE:

lack of vitality, short attention span after activity due to fatigue; remediation may be needed in order for child to keep up with classmates; may be some periods of time when child will be out of school (hospital/homebound)

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - same as normal
   b. Physical Education - follow the physician's written instructions concerning limitations; limit instruction until medical advice is available
   c. Diet - variable; limit salt intake; control excessive weight
2. ACADEMIC
   normal; limitations depend on physician's prescription
3. CLASSROOM MANAGEMENT
   always remain calm; do not use corporal punishment

FEEDBACK ALERTS:

In case of cardiac crisis:

1. Fainting - lie down in comfortable position, head low, legs held up
2. Shortness of Breath - sit up, loosen tight fitting clothing

CALL DOCTOR AND/OR PARENTS

NOTES

CONDITION: Hemophilia

DEFINITION: a hereditary condition in which blood clots very slowly or not at all

SYMPTOMS: excessive blood loss from small bleeding points; hemorrhaging; swelling and pain in joints

INCIDENCE: 1 in 10,000

AGE OF ONSET: infancy

PROGNOSIS: good with adequate treatment

TREATMENT: medication; education regarding the limitations in activity

EDUCATIONAL SIGNIFICANCE:

develop intellectual ability since occupations will be limited; career guidance toward non-hazardous sedentary occupations

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - same as normal child but with extra precautions against injuries
   b. Physical Education - no contact sports or activities with the likelihood of being hit with an object; activity and exercise important for good joint condition; swimming, golf, hiking
   c. Diet - needs to control weight
2. ACADEMIC
   develop academic skills and introduce health care education and career guidance at elementary school
3. CLASSROOM MANAGEMENT
   avoid corporal punishment; discipline limited to taking away privileges if punishment is deemed necessary; more often, a reward system may prove to be a better incentive for productive effort than punishment

FEEDBACK ALERTS:

teachers should be aware of bruises to head, chest, stomach, or limbs; careful observation in case of accidents; for open wounds apply pressure with a cold cloth; bleeding episodes increase in late winter and spring; for severe accidents or open cuts, call parents, and doctor; transport to hospital

NOTES

CONDITION:	Hyperkinesis
DEFINITION:	a delayed or inadequate development in the central nervous system resulting in an inability to modulate muscular activity and an altered effect of Reticular Activator System
SYMPTOMS:	hyperactivity, short attention span, distractability, emotional lability, impulsiveness; poor fine motor coordination, perceptual problems
INCIDENCE:	3 to 4%
AGE OF ONSET:	birth
PROGNOSIS:	good
TREATMENT:	behavior modification, diet, medication, home management, special education techniques in order to allow the child to keep up with his peers academically

EDUCATIONAL SIGNIFICANCE:

characteristic behaviors and perceptual difficulties may prevent the child from performing in accord with mental ability; often accompanied by learning disabilities; special education may be necessary

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - preferential seating; space for work with limited distractions
   b. Physical Education - encourage physical activity; allow time and encourage coordination-building activities; readjustment time will in classroom after exercise
   c. Diet - varies according to physician's recommendations; normal for most; some are limited in the amount of sugars, chocolate, and artificial food colors
2. ACADEMIC

   provide special education if needed;

use structured, short tasks for best results; provide remediation where necessary

3. CLASSROOM MANAGEMENT

use constant reinforcement; provide structure; behavior modification for disruptive behavior; provide "legal excuses" for some movement; impulsive incidences typical

FEEDBACK ALERTS:

increased hyperactivity and other disruptive behaviors; contact parents and/or physician to report significant changes; watch for depressive symptoms; report aggressive behavior

NOTES

CONDITION: Hypertension

DEFINITION: high blood pressure disease

SYMPTOMS: none or many; can include headache, dizziness, fatigue, and shortness of breath, swelling ankles

INCIDENCE: less than 1%

AGE OF ONSET: variable; young adulthood

PROGNOSIS: variable, depending on severity and age of onset

TREATMENT: dietary and medicinal; weight reduction if obese

EDUCATIONAL SIGNIFICANCE:

health education and career guidance important; limited physical activity; physical stamina will be limited so intellectual ability should be developed to the fullest

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - seat near chalkboard because of possible visual changes
   b. Physical Education - little or no strenuous activity
   c. Diet - low sodium (salt); control excess weight
2. ACADEMIC
   develop intellectual ability; initiate health education and career guidance at elementary level
3. CLASSROOM MANAGEMENT
   short reading assignments; large-print books if vision impaired

FEEDBACK ALERTS:

headaches, weakness, chest pains, shortness of breath, visual changes; contact parents and/or doctor

NOTES

CONDITION: Hypoglycemia

DEFINITION: low blood sugar

SYMPTOMS: sweating, shakiness, trembling, anxiety, hunger sensations, headache, occasional seizures and coma

INCIDENCE: 1.25 in 1,000

AGE OF ONSET: any

PROGNOSIS: good

TREATMENT: daily; diet high in protein and low in carbohydrates; when symptomatic: sweets plus protein and carbohydrates

EDUCATIONAL SIGNIGICANCE:

intermittently dull and bright; cycle peaks at 10:00 and 2:00 and 4:00 and 8:00; often hyperactive; observation will help determine individual cycle

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - same as normal child
   b. Physical Education - eat before exercise
   c. Diet - eat more often; allow snack at 10:00 and 2:00; if symptomatic encourage following high protein diet
2. ACADEMIC
   make allowances for periods when the child functions in the "dull range"; provide basic skills in early morning and immediately after eating
3. CLASSROOM MANAGEMENT
   note that dull periods are not periods of stubbornness; variable abilities are not indicators of intentional rebellion

FEEDBACK ALERTS:

sleepiness and other allied states of

consciousness; seizures or comas; if trembling appears, give child sweets along with peanut butter, and cokes or other soft drinks; always contact parents and/or physician following crisis; if seizures and/or coma occurs, do not force feed; call physician or EMT

NOTES

CONDITION: Juvenile Diabetes

DEFINITION: a metabolic condition that results in too much sugar in the blood and urine

SYMPTOMS: excessive urination; increased thirst; weight loss; general weakness, visual disturbances; drowsiness; slow healing of cuts and bruises; skin disorders; intense itching

INCIDENCE: 1.25 in 1,000

AGE OF ONSET: infancy to old age

PROGNOSIS: good if controlled

TREATMENT: diet, exercise, medication

EDUCATIONAL SIGNIFICANCE:

variable visual acuity; career guidance and health education toward occupations with constant levels of exercise

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL

   a. Classroom Environment - arrangements for privacy in checking urine for sugar and acetone; similar set-up is needed for injections at school if insulin required; preferential seating for visual problems if present

   b. Physical Education - regular exercise if beneficial and should be constant from day to day; preferred time - after lunch with a snack provided afterwards

   c. Diet - limited sugars and carbohydrates; meal intake on regular schedules

2. ACADEMIC

   prepare for sedentary occupation; emphasize intellectual preparation

3. CLASSROOM MANAGEMENT

   hostility, anxiety, and overdependence

often result from this condition; constant firm treatment without undue stress is recommended; treat as a normal child except when sick

FEEDBACK ALERTS:

1. Insulin Shock - from too little sugar; symptoms are tremors, hunger, sweating, nausea, and blurred vision; if not treated promptly, loss of consciousness and coma may occur; ACTION: give candy, sweetened orange juice, peanut butter, and coke; report to parents and/or physician immediately. REMEMBER: after child loses consciousness, DO NOT FORCE FEED; call doctor or Emergency Medical Technicians
2. Diabetic Coma - from too much sugar; symptoms are nausea, drowsiness, extreme thirst, headache, blurred vision; abdominal pain, rapid breathing; an acetone smell of breath; if not treated, may lead to loss of consciousness

and coma; ACTION: report to physician and parents; if loss of consciousness occurs, lay out flat with head low, legs elevated and call the doctor or EMT

NOTES

CONDITION: Lead Poisoning

DEFINITION: toxic levels of lead in blood and brain tissues

SYMPTOMS: weakness, irritability, weight loss, vomiting, personality changes, tremors, a lead line on the gum, visual problems causing double vision

INCIDENCE: variable: 1 in 1,000 to 1 in 10,000

AGE OF ONSET: usually children under five

PROGNOSIS: under 2 years, prognosis poor; over 2 years, good if removed from lead sources

TREATMENT: medication (Bal and Chelation Therapy); diet

EDUCATIONAL SIGNIFICANCE:

limits mental ability (often permanent); sluggish, dull, apathetic; doesn't attend

well; educational placement based on psychoeducational assessment

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - remove any possible lead sources (lead based paint, orange and yellow colored toys, artists paints, etc.)
   b. Physical Education - physician's statement for directions - usually no limitations
   c. Diet - high calcium, high phosphorus diet; large doses of Vitamin D - according to physician's directions
2. ACADEMIC
   evaluate for placement in EMR class until effects of lead poisoning disappear; reevaluate every three months until the mental ability is stabilized; long-term effects not likely corrected early
3. CLASSROOM MANAGEMENT
   depends upon symptoms particularly if

neurological damage results

FEEDBACK ALERTS:

look for recurrence of symptoms to determine if still in contact with lead source

NOTES

CONDITION: Leukemia

DEFINITION: a disease of the blood forming organs in which abnormal white blood cells accumulate in the blood and bone marrow

SYMPTOMS: easy bruising, bleeding, especially gums, fever, weakness and chronic fatigue, pale skin and gums, enlarged lymph nodes

INCIDENCE: 4 in 100,000

AGE OF ONSET: 2 to 5 years or older

PROGNOSIS: guarded

TREATMENT: chemotherapy, transfusions, medications

EDUCATIONAL SIGNIFICANCE:

long periods of schooling on hospital/homebound basis; illness affects alertness, ability to concentrate, general well-being; during periods of remission,

the child may attend school and appear normal, during which time he should be treated as any normal child

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL

   a. Classroom Environment

      normal atmosphere is allowed since attendance is during periods of remission

   b. Physical Education

      according to physician's instructions; limited - no contact sports during exacerbations of disease; may or may not be limited during remission, depending upon enlarged spleen and type of leukemia

   c. Diet

      provide any foods that the child wishes to eat; may need to limit sugars if on Preduisone

2. ACADEMIC

   treat as a chronically ill child; allow self-pacing

3. CLASSROOM MANAGEMENT

treat as normally as possible

FEEDBACK ALERTS:

fever, abdominal pains, bleeding, bruising, gum and nose bleeds; avoid contact with infectious diseases

NOTES

CONDITION: Nephritis (Glomerulonephritis)

DEFINITION: a kidney disease of sudden onset in which blood and protein are present in urine

SYMPTOMS: history of streptococcal infections; headache; vomiting; fever; moderate edema (swelling); high blood pressure; shortness of breath; puffy eyes

INCIDENCE: 1 in 10,000

AGE OF ONSET: childhood or adult

PROGNOSIS: fair to good depending on type and severity

TREATMENT: medication, bed rest, low sodium diet, low protein diet, steroids occasionally

EDUCATIONAL SIGNIFICANCE:

dull during active infections; visual and auditory problems; miss a lot of

school; health education to avoid and treat all streptococcal infection; fatigue easily

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - same as other health impaired children
   b. Physical Education - amount of activity depends on the severity of the condition
   c. Diet - low salt and protein
2. ACADEMIC
   dull intellectually when ill; will need remediation after attacks; limit homework; fatigues easily
3. CLASSROOM MANAGEMENT
   check vision and hearing every six months; treat as health impaired child during recovery; treat as normal during well periods; if there are indications of visual and hear- problems, provide preferential seating

FEEDBACK ALERTS:

puffy eyelids; swelling; weight gain; noticeable shortness of breath; visual and hearing changes; relapse common <u>especially during adolescence</u>

NOTES

CONDITION: Rheumatic fever

DEFINITION: an acute or chronic systemic inflammatory process characterized by attacks of fever, swelling of the joints, and heart involvement, following streptococcal infection

SYMPTOMS: fever, pain and swelling in joints, rash, inability to gain weight, shortness of breath, and heart problems

INCIDENCE: 2% of school population

AGE OF ONSET: 5 to 15 years or above

PROGNOSIS: good

TREATMENT: bed rest, diet (low salt), weight control, medication (long term antibiotic prophylaxis against recurrent streptococcal infections)--maybe for lifetime

EDUCATIONAL SIGNIFICANCE:

mainly loss of school days because of

recurring condition; hospital/home-bound initially and continue Other Health Impaired services; career education toward occupational role if damage to heart results; health education to prevent recurrence

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - preferential seating for observation and/or weakened senses - usually no limitations or weakness when quiescent
   b. Physical Education - only by a physician's prescription
   c. Diet- bland, low salt, high protein, high carbohydrates when ill; regular diet when quiescent
2. ACADEMIC
   remediation for materials missed during illness; limit homework and other work--tires easily

3. CLASSROOM MANAGEMENT

treat as chronically ill

FEEDBACK ALERT:

fever, pain in joints, and swelling in joints; chest pains, shortness of breath, rash

NOTES

CONDITION:	Sickle Cell Anemia
DEFINITION:	an inherited abnormality of hemoglobin (blood) limited almost exclusively to the Negro population
SYMPTOMS:	tiredness, difficulty breathing, fast heart beat, pain in joints, paleness of fingernails and lips, pain in abdomen, blood in urine, jaundice (yellow cast to eyes), headache, nausea, vomiting
INCIDENCE:	10% of Black population have traits; to develop disease both parents must have trait
AGE OF ONSET:	congenital
PROGNOSIS:	guarded
TREATMENT:	medical care to alleviate symptoms, crises, including transfusions

EDUCATIONAL SIGNIFICANCE:

child periodically suffers from a lot of pain; may be absent from school often and requires hospitalization frequently; physical activity will be limited

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - isolation from children with infectious disease
   b. Physical Education - no underwater swimming, breathholding or vigorous exercises
   c. Diet - care to control weight
2. ACADEMIC

   essential that child master basic skills; will need remediation during times of disease control; guidance toward careers with limited physical exertion; no high altitude work

3. CLASSROOM MANAGEMENT

treat as normal child but be alert for crisis symptoms

FEEDBACK ALERTS:

fever, vomiting, jaundice, abdominal pain, etc.

NOTES

CONDITION: Tuberculosis

DEFINITION: a communicable disease caused by a tubercle bacillus

SYMPTOMS: low grade fever, weight loss, cough, fatigue, nervous, irritability

INCIDENCE: in direct proportion to exposure to adults with (active) disease

AGE OF ONSET: any

PROGNOSIS: good

TREATMENT: drug therapy for 1 to 2 years

EDUCATIONAL SIGNIFICANCE:

may have bacillus and be dormant for long time; communicable during onset or reactivation; will be out of school for the infectious period only; may not feel well; will tire easily

EDUCATIONAL ADAPTATIONS:

1. PHYSICAL
   a. Classroom Environment - same as normal child
   b. Physical Education - limited activity while active--may have residual lung scarring causing easy fatigue with exertion
   c. Diet - Nutritious foods to assist in weight gain; protein, vitamins especially A and C
2. ACADEMIC
   do not overtire; limit homework; treat as any child with a chronic disease
3. CLASSROOM MANAGEMENT
   treat as a child with limited stamina

FEEDBACK ALERTS:

cough, blood in sputum, persistent weight loss; pale; generally sickly in actions and appearance

NOTES

OTHER SOURCES OF INFORMATION

Information, including free and inexpensive materials, may be obtained from:

ALSAC - St. Jude Children's Research Hospital
611 Massachusetts Avenue
Indianapolis, Ind. 46204

Leukemia Society of America
211 East 43rd Street
New York, N.Y. 10017

American Cancer Society
219 East 42nd Street
New York, N.Y. 10017

World Federation of Hemophilia
1420 St. Mathieu Suite 806
Montreal H 3 H 2J1, P.Q. Canada

Children's Blood Foundation
342 Madison Avenue
New York, N.Y. 10017

Association for Sickle Cell Anemia
520 Fifth Avenue
New York, N.Y. 10036

Children's Asthma Research Institute and Hospital at Denver
3401 West 19th Avenue
Denver, Colo. 80204

Hay Fever Prevention Society
Rosewall Gardens, Suite 2-6
2300 Sedqwick Avenue
Bronx, N.Y. 10468

American Association of Clinical Immunology and Allergy
P.O. Box 912 DTS
Omaha, Neb. 68101

Society for Pediatric Urology
c/o Richard Lyon, MD
3000 Colby Street
Berkely, Calif. 94705

American Urological Association
1120 North Charles Street
Baltimore, Md. 21201

American Thyroid Association
Mayo Clinic
Rochester, Minn. 55901

Society of Toxicology
c/o Dr. Robert Scala
Medical Research Division
Esso Research
P. O. Box 45
Linden, N.J. 07056

Steven Jerrick, Exec. Director
American School Health Association
Kent, Ohio 44240

National Institute of Arthritis, Metabolism and Digestive Disease
National Institute of Health
Bethesda, Md. 20014

American Psychiatric Association
1700 18th Street, NW
Washington, D.C. 20036

Society for Public Health Education
655 Sutter Street
San Francisco, Calif. 94102

National Foundation for the Handicapped and Disabled
(Rehabilitation)
1643 West Ogden Avenue
Chicago, Ill. 60612

American Lung Association
1740 Broadway
New York, N.Y. 10019

Arthritis Foundation
1212 Avenue of Americas
New York, N.Y. 10036

American Rheumatism Association
1212 Avenue of Americas
New York, N.Y. 10036

American Association of Poison Control Centers
Children's Memorial Hospital
44th Dewey Avenue
Omaha, Neb. 68105

National Association of Physical Therapists
P. O. Box 367
West Covina, Calif. 91793

American Academy of Family Physicians
1740 West 92nd Street
Kansas City, Mo. 64114

American Society for Clinical Pharmacology and Therapeutics
1718 Gallagher Road
Norristown, Penn. 19401

American Foundation for Pharmaceutical Education
777 14th Street NW
Washington, D.C. 20005

American Pharmaceutical Association
2215 Constitution Avenue NW
Washington, D.C. 20037

National Kidney Foundation
116 East 27th Street
New York, N.Y. 10016

Excerpta Medica Foundation
228 Alexander Street
Princeton, N.J. 08540

Adrenal Metabolic Research Society of the Hypoglycemia Foundation
P. O. Box 98
Mt. Vernon, N.Y. 10552

National Heart and Lung Institute
National Institute of Health
9600 Rockville Pike Bldg. 31, Room 5A50
Bethesda, Md. 20014

American Heart Association
44 East 23rd Street
New York, N.Y. 10010

American Health Foundation
1370 Avenue of Americas
New York, N.Y. 10019

National Foundation - March of Dimes
Box 2000
White Plains, N.Y. 10602

Juvenile Diabetes Foundation
3701 Conshuhocken Avenue
Philadelphia, Penn. 19131

American Diabetic Association
18 East 48th Street
New York, N.Y. 10017

American Epidemiological Society
University of Kentucky
Medical Center
Lexington, Ky. 40506

Epilepsy Foundation of America
1828 L Street NW, Suite 406
Washington, D.C. 20036

American Epilepsy Society
Department of Neurology
University of Minnesota
Box 341, Mayo Memorial Bldg.
Minneapolis, Minn. 55455

American Medical Association
535 North Dearborn Street
Chicago, Ill. 60610

American Neurological Association
c/o Samual A. Trufant, MD
Cincinnati Hospital
Cincinnati, Ohio 45229

Child Neurology Program
University of Virginia Hospital
Charlottesville, Va. 22901

Ambulatory Pediatric Association
2300 Tupper Street
Montreal, 108 P.Q. Canada

Society for Pediatric Research
College of Physicians and Surgeons
630 West 168th Street
New York, N.Y. 10032

American Pediatric Society
333 Cedar Street
New Haven, Conn. 06510